1
00:00:00,359 --> 00:00:03,320
Launching America on a commercial spacecraft…

2
00:00:03,320 --> 00:00:07,810
A NASA astronaut is headed back to the space station …

3
00:00:07,810 --> 00:00:12,929
And new close-up imagery of asteroid Bennu … a few of the stories to tell you about

4
00:00:12,929 --> 00:00:15,879
– This Week at NASA!

5
00:00:15,879 --> 00:00:22,410
A new era of American spaceflight got underway on May 30 with the historic launch of NASA’s

6
00:00:22,410 --> 00:00:27,930
SpaceX Demo-2 test flight to the International Space Station, from our Kennedy Space Center,

7
00:00:27,930 --> 00:00:28,930
in Florida.

8
00:00:28,930 --> 00:00:33,200
“Liftoff of the Falcon 9 and Crew Dragon.

9
00:00:33,200 --> 00:00:34,200
Go NASA.

10
00:00:34,200 --> 00:00:35,200
Go SpaceX.

11
00:00:35,200 --> 00:00:36,610
Godspeed Bob and Doug!”

12
00:00:36,610 --> 00:00:41,560

Our Bob Behnken and Doug Hurley rode to orbit
aboard SpaceX’s Crew Dragon spacecraft,

13
00:00:41,560 --> 00:00:43,870
which the astronauts named, Endeavour.

14
00:00:43,870 --> 00:00:48,690
It was the first launch of Americans on an
American spacecraft from the U.S. in almost

15
00:00:48,690 --> 00:00:50,190
nine years.

16
00:00:50,190 --> 00:00:55,129
Other firsts during the journey included the
first on-orbit tour inside the Crew Dragon

17
00:00:55,129 --> 00:00:56,129
…

18
00:00:56,129 --> 00:00:57,129
“I think I was requested to do a backflip.

19
00:00:57,129 --> 00:01:04,040
I’m going to kind of do a side spin, which
is a little bit of a permutation on that request.”

20
00:01:04,040 --> 00:01:07,960
The first in-flight maneuvering of the spacecraft
by astronauts onboard …

21
00:01:07,960 --> 00:01:10,750
“It really worked out well.

22
00:01:10,750 --> 00:01:14,170
And was a joy to fly.

23
00:01:14,170 --> 00:01:18,150
And, I’m guessing it was the first time

a space vehicle was flown with a touchscreen.”

24
00:01:18,150 --> 00:01:21,040
And one of the crew’s first views of Earth
from Crew Dragon.

25
00:01:21,040 --> 00:01:22,720
“Good morning Dragon.

26
00:01:22,720 --> 00:01:25,330
We hope your evening aboard Endeavour was
restful …”

27
00:01:25,330 --> 00:01:29,840
The next day, several hours after the first
crew wakeup call on Crew Dragon …

28
00:01:29,840 --> 00:01:34,510
“Dragon’s coming up on just one hundred
meters away from the space station.”

29
00:01:34,510 --> 00:01:40,909
The spacecraft made its final approach to
the station – docking at 10:16 a.m. EDT

30
00:01:40,909 --> 00:01:45,430
while flying over the northern border of China
and Mongolia.

31
00:01:45,430 --> 00:01:50,080
A few hours later, Hurley and Behnken were
welcomed aboard the space station by fellow

32
00:01:50,080 --> 00:01:54,189
NASA astronaut Chris Cassidy and others on
the station crew.

33
00:01:54,189 --> 00:01:58,280
“We are so grateful for the service of,
not just our two astronauts that embarked

34
00:01:58,280 --> 00:02:03,990
on this mission, but the hundred thousand
plus people that participated in this mission."

35
00:02:03,990 --> 00:02:07,980
The astronauts are scheduled for an extended
stay at the space station.

36
00:02:07,980 --> 00:02:13,460
The mission is an end-to-end test flight to
eventually certify SpaceX for regular crew

37
00:02:13,460 --> 00:02:18,819
flights to the station as part of NASA's
Commercial Crew Program.

38
00:02:18,819 --> 00:02:24,050
Astronaut Kate Rubins has been assigned to
a six-month mission as a member of the International

39
00:02:24,050 --> 00:02:27,950
Space Station's Expedition 63/64 crew.

40
00:02:27,950 --> 00:02:33,890
She is scheduled to launch with two Russian
cosmonauts Oct. 14 from the Baikonur Cosmodrome

41
00:02:33,890 --> 00:02:35,510
in Kazakhstan.

42
00:02:35,510 --> 00:02:38,730
This will be her second spaceflight.

43
00:02:38,730 --> 00:02:46,420
In 2016 she spent 115 days in space as a member
of the station's Expedition 48/49 crew.

44
00:02:46,420 --> 00:02:52,120

Our OSIRIS-REx spacecraft captured images
seen in this mosaic during a reconnaissance

45
00:02:52,120 --> 00:02:58,470
pass over Osprey – the mission's backup
sample collection site on asteroid Bennu.

46
00:02:58,470 --> 00:03:03,780
The spacecraft passed just 820-feet above
the site, the closest from which Osprey has

47
00:03:03,780 --> 00:03:04,879
been imaged.

48
00:03:04,879 --> 00:03:10,110
OSIRIS-REx is scheduled to make its first
sample collection attempt at primary site

49
00:03:10,110 --> 00:03:12,709
Nightingale on Oct. 20.

50
00:03:12,709 --> 00:03:18,910
A virtual meeting of the American Astronomical
Society featured several items of note about

51
00:03:18,910 --> 00:03:23,560
the supermassive black hole at the center
of our Milky Way galaxy.

52
00:03:23,560 --> 00:03:28,650
This included some insight from our Hubble
Space Telescope about a cataclysmic explosion

53
00:03:28,650 --> 00:03:35,580
there about 3.5 million years ago, a new virtual
reality experience based on data from several

54
00:03:35,580 --> 00:03:41,810
telescopes – including our Chandra X-ray
Observatory, and new research from the SOFIA

55
00:03:41,810 --> 00:03:47,280
airborne observatory about how materials at
the center of the Milky Way are affected by

56
00:03:47,280 --> 00:03:49,650
magnetic fields at play there.

57
00:03:49,650 --> 00:03:52,310
That’s what’s up this week @NASA …